

Symposium

THE FIFTH SCIENTIFIC SYMPOSIUM: *APOPTOSIS AND NEOPLASMS*

PREFACE

The *5th Symposium on Apoptosis and Neoplasms* was held in Zagreb, Croatia, on March 27th 2018 in the Library of Croatian Academy of Sciences and Arts, organised by Department of Medical Sciences, Committee on genomics and proteomics in oncology. There were 10 presentations and 80 participants.

In an attempt to promote translational medicine, the goal of the *5th Symposium on Apoptosis and Neoplasms* is to develop new research approaches into the complexity of biological systems and their regulation, especially in the field of apoptosis and oncogenesis. Thus, this symposium helps in reducing various barriers in order to establish better collaboration between all scientists and researchers, and improves the development of multidisciplinary research. In this sense, we hope to contribute to the redevelopment of translational and clinical science. Eight open topics followed after two introductory lectures, *Evolutio-Conditio sine qua non*, and *Macroevolutionary aspects of oncogenesis*. These two introductory lectures presented recent data in research and interpretations of the theory of evolution and oncogenesis and have been connected to the overview: *Metamorphosis, autophagocytosis, "whole body apoptosis" and neoplasms*. This overview was presented at the *4th Symposium on Apoptosis and Neoplasms*, organised in 2017. by professor Mladen Belicza, who spoke on oncogenesis being a part of evolutionary metamorphosis and apoptosis, and proposed that investigations into the pathogenesis of human diseases be integrated in health research of the entire biocenosis.

The eight open topics, *The role of postreplicative mismatchrepair (MMR) in tumorigenesis*, *Liquid biopsy in oncology – current achievements and new challenges*, *Use of free DNA in tumor diagnostics*, *Comparative analysis of apoptotic activity in testicular tumors and mouse teratocarcinoma animal model*, *Confocal laser scanning microscopy at the Ruđer bošković Institute*, *p53/p63/p73 protein network in human tumors*, *Cell block - view below morphology level*, *Valproate enhances apoptosis of gastrulating mammalian embryo cultivated in vitro*, represented an actual part of croatian investigation in multidisciplinary cancer research.

President of the Organising Committee of the Symposium
Mladen Belicza